

IN THE CLAIMS

1-102. (Cancelled)

103. (New) A system for replacing at least a portion of a natural facet of a first vertebra, the system comprising:

a superior articular surface shaped to articulate with an adjacent inferior articular surface;
an inferior articular surface shaped to articulate with an adjacent superior articular surface;

and

a fixation member implantable in the first vertebra to secure the superior articular surface and the inferior articular surface to the first vertebra in any of a plurality of relative orientations between the superior and inferior articular surfaces.

104. (New) The system of claim 103, wherein the superior articular surface is incorporated into a superior prosthesis and the inferior articular surface is incorporated into an inferior prosthesis.

105. (New) The system of claim 104, wherein the superior prosthesis, the inferior prosthesis, and the fixation member are separate pieces from each other.

106. (New) The system of claim 104, wherein at least one prosthesis of the superior prosthesis and the inferior prosthesis is configured such that, when the prosthesis is secured to the first vertebra, no portion of the prosthesis contacts a lamina of the first vertebra.

107. (New) The system of claim 104, wherein at least one prosthesis of the superior prosthesis and the inferior prosthesis is configured such that, when the prosthesis is secured to the first vertebra, no portion of the prosthesis encircles a spinous process of the first vertebra.

108. (New) The system of claim 104, wherein each of the superior and inferior prostheses comprises an opening; wherein the fixation member comprises a portion sized to pass through the openings to facilitate securement of the superior and inferior prostheses to the first vertebra with the fixation member.

109. (New) The system of claim 108, wherein at least one of the superior and inferior prostheses comprises a flange through which the opening passes, wherein the corresponding superior or inferior articular surface is oriented perpendicular or nearly perpendicular to the flange.

110. (New) The system of claim 104, further comprising an enlarged head securable to the fixation member to press portions of the superior and inferior prostheses against the first vertebra.

111. (New) The system of claim 104, wherein the inferior prosthesis is configured such that, when the inferior prosthesis is secured to the first vertebra, the inferior prosthesis is substantially free of contact with a posterior surface of a lamina of the first vertebra.

112. (New) The system of claim 103, wherein the fixation member is implantable in a pedicle of the first vertebra to secure both of the superior articular surface and the inferior articular surface to a single side of the first vertebra.

113. (New) A system for replacing at least a portion of a natural facet of a first vertebra, the system comprising:

a superior prosthesis comprising a superior articular surface shaped to articulate with an adjacent inferior articular surface;

an inferior prosthesis comprising an inferior articular surface shaped to articulate with an adjacent superior articular surface; and

a fixation member implantable in the first vertebra to secure the superior prosthesis and the inferior prosthesis to the first vertebra;

wherein the superior prosthesis, the inferior prosthesis, and the fixation member are separate pieces from each other.

114. (New) The system of claim 113, wherein at least one prosthesis of the superior prosthesis and the inferior prosthesis is configured such that, when the prosthesis is secured to the first vertebra, no portion of the prosthesis contacts a lamina of the first vertebra.

115. (New) The system of claim 113, wherein at least one prosthesis of the superior prosthesis and the inferior prosthesis is configured such that, when the prosthesis is secured to the first vertebra, no portion of the prosthesis encircles a spinous process of the first vertebra.

116. (New) The system of claim 113, wherein each of the superior and inferior prostheses comprises an opening; wherein the fixation member comprises a portion sized to pass through the openings to facilitate securement of the superior and inferior prostheses to the first vertebra with the fixation member.

117. (New) The system of claim 116, wherein at least one of the superior and inferior prostheses comprises a flange through which the opening passes, wherein the corresponding superior or inferior articular surface is oriented perpendicular or nearly perpendicular to the flange.

118. (New) The system of claim 113, further comprising an enlarged head securable to the fixation member to press portions of the superior and inferior prostheses against the first vertebra.

119. (New) The system of claim 113, wherein the inferior prosthesis is configured such that, when the inferior prosthesis is secured to the first vertebra, the inferior prosthesis is substantially free of contact with a posterior surface of a lamina of the first vertebra.

120. (New) The system of claim 113, wherein the fixation member is implantable in a pedicle of the first vertebra to secure both of the superior articular surface and the inferior articular surface to a single side of the first vertebra.

121. (New) A method for replacing at least a portion of a natural facet of a first vertebra, the method comprising:

- positioning a superior articular surface to articulate with an adjacent inferior articular surface;
- positioning an inferior articular surface at any of a plurality of orientations with respect to the superior articular surface to enable the inferior articular surface to articulate with an adjacent superior articular surface; and

- implanting a fixation member in the first vertebra to secure the positioned superior and inferior articular surfaces to the first vertebra.

122. (New) The method of claim 121, wherein the superior articular surface is incorporated into a superior prosthesis and the inferior articular surface is incorporated into an inferior prosthesis, wherein positioning the superior articular surface comprises positioning the superior prosthesis, wherein positioning the inferior articular surface comprises positioning the inferior prosthesis.

123. (New) The method of claim 122, wherein the steps of positioning the superior articular surface, positioning the inferior articular surface, and implanting the fixation member are all carried out independently from each other.

124. (New) The method of claim 122, wherein at least one of positioning the superior prosthesis and positioning the inferior prosthesis is carried out such that after the corresponding prosthesis has been positioned, no portion of the prosthesis contacts a lamina of the first vertebra.

125. (New) The method of claim 122, wherein at least one of positioning the superior prosthesis and positioning the inferior prosthesis is carried out such that after the corresponding prosthesis has been positioned, no portion of the prosthesis encircles a spinous process of the first vertebra.

126. (New) The method of claim 122, wherein each of the superior and inferior prostheses comprises an opening; the method further comprising passing a portion of the fixation member through the openings prior to implantation of the fixation member in the first vertebra.

127. (New) The method of claim 126, wherein at least one of the superior and inferior prostheses comprises a flange through which the opening passes, wherein the corresponding superior or inferior articular surface is oriented perpendicular or nearly perpendicular to the flange.

128. (New) The method of claim 122, further comprising securing an enlarged head to the fixation member to press portions of the superior and inferior prostheses against the first vertebra.

129. (New) The method of claim 122, wherein positioning the inferior prosthesis is carried out such that after the inferior prosthesis has been positioned, the inferior prosthesis is substantially free of contact with a posterior surface of a lamina of the first vertebra.

130. (New) The method of claim 121, wherein implanting the fixation member in the first vertebra comprises implanting the fixation member in a pedicle of the first vertebra to secure both of the superior articular surface and the inferior articular surface to a single side of the first vertebra.

131. (New) A method for replacing at least a portion of a natural facet of a first vertebra, the method comprising:

positioning a superior prosthesis such that a superior articular surface of the superior prosthesis is positioned to articulate with an adjacent inferior articular surface;

positioning an inferior prosthesis such that an inferior articular surface of the inferior prosthesis is positioned to articulate with an adjacent superior articular surface; and

implanting a fixation member in the first vertebra to secure the positioned inferior and superior articular surfaces to the first vertebra;

wherein the superior prosthesis, the inferior prosthesis, and the fixation member are separate pieces from each other.

132. (New) The method of claim 131, wherein at least one of positioning the superior prosthesis and positioning the inferior prosthesis is carried out such that after the corresponding prosthesis has been positioned, no portion of the prosthesis contacts a lamina of the first vertebra.

133. (New) The method of claim 131, wherein at least one of positioning the superior prosthesis and positioning the inferior prosthesis is carried out such that after the corresponding prosthesis has been positioned, no portion of the prosthesis encircles a spinous process of the first vertebra.

134. (New) The method of claim 131, wherein each of the superior and inferior prostheses comprises an opening; the method further comprising passing a portion of the fixation member through the openings prior to implantation of the fixation member in the first vertebra.

135. (New) The method of claim 134, wherein at least one of the superior and inferior prostheses comprises a flange through which the opening passes, wherein the corresponding superior or inferior articular surface is oriented perpendicular or nearly perpendicular to the flange.

136. (New) The method of claim 131, further comprising securing an enlarged head to the fixation member to press portions of the superior and inferior prostheses against the first vertebra.

137. (New) The method of claim 131, wherein positioning the inferior prosthesis is carried out such that after the inferior prosthesis has been positioned, the inferior prosthesis is substantially free of contact with a posterior surface of a lamina of the first vertebra.

138. (New) The method of claim 131, wherein implanting the fixation member in the first vertebra comprises implanting the fixation member in a pedicle of the first vertebra to secure both of the superior articular surface and the inferior articular surface to a single side of the first vertebra.